

REMARKS/ARGUMENTS

This Amendment is being filed in response to the Office Action dated October 3, 2008. Reconsideration and allowance of the application in view of the amendments made above and the remarks to follow are respectfully requested.

Claims 1-15 are pending in the Application.

The Applicants want to thank the Examiner for the indication that claims 6, 11 and 14 contain allowable subject matter.

In the Office Action, the specification is objected to for containing a reference to the claims as well as other minor informalities. In accordance with the Examiner's suggestions, the reference to the claims in the specification is deleted herein and the minor informalities are corrected. Accordingly, it is respectfully requested that the objections to the specification be withdrawn.

Claims 1-15 are objected to for informalities. In accordance with the helpful suggestions contained in the Office Action, the claims are amended to cure the noted informalities. In addition, further amendments in accordance with the suggestions are provided in the claims. By these amendments, the claims are not amended to address issues of patentability and Applicants respectfully reserve

all rights under the Doctrine of Equivalents. Applicants furthermore reserve the right to reintroduce subject matter deleted herein at a later time during the prosecution of this application or continuing applications. Accordingly, withdrawal of the objection to the claims is respectfully requested.

Claims 15 is rejected under 35 U.S.C. §101 as allegedly being directed to non-statutory subject matter. Without agreeing with the Examiner, and merely to expedite consideration and allowance of the present application, Applicants have elected to amend claim 15 to recite "... rendering the reconstruction volume", clearly a useful, concrete and tangible result. Claim 15 is also rejected as allegedly "drawn to a computer program per se. This allegation is respectfully traversed. Claim 15 recites in pertinent part "[c]omputer program stored on a computer readable medium for a data processor for performing a reconstruction of computed tomography (CT) data, ..., wherein the computer program causes the data processor to perform the following operations ..." Clearly claim 15 is not merely drawn to a computer program per se. Accordingly, it is respectfully requested that the amendment to the claims be entered and that the rejection of claim 15 under 35 U.S.C. §101 be withdrawn.

Claims 1-5, 12-13 and 15 are rejected under 35 U.S.C. §112, second paragraph, because it is alleged that "the specification, while being enabling for x-ray radiation, does not reasonably provide enablement for all types of radiation such as visible and particle radiation. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims." Page 7, lines 31-32 are cited in support of this position. This position is respectfully traversed.

The cited section refers to one embodiment of the present invention depicted in FIG. 1, and states that "[r]eference character 4 designates a source of radiation, such as an x-ray source ..." It is respectfully submitted that this reference to a x-ray source is clearly a non-limiting example. However, in the interest of expediting consideration and allowance of the pending claims, the Applicants have elected to amend the claims to recite "computed x-ray tomography (CT) data ..." Accordingly, it is respectfully requested that the 35 U.S.C. §112, second paragraph rejection of claims 1-5, 12-13 and 15 be withdrawn.

In the Office Action, claims 1-4, 7-10 and 12-13 are rejected under 35 U.S.C. §103(a) as allegedly being obvious over U.S. Patent

No. 6.470,067 to Harding ("Harding") in view of an article entitled "A Reconstruction Algorithm For Coherent Scatter Computed Tomography Based On Filtered Back-Projection", by Van Stevendaal, 22 August 2003, Medical Physics, Volume 30, Number 9, Pages 2465-2474), ("Van Stevendaal"). Claim 5 is rejected under 35 U.S.C. §103(a) as allegedly being obvious over Harding in view of Van Stevendaal in further view of an article entitled "Improved 2D Rebinning Of Helical Cone-Beam CT Data Using John's Equation", by Defrise, November 2002, 2002 IEEE Nuclear Science Symposium Conference Record, Volume 3, Pages 1463-1469), ("Defrise"). Claim 15 is rejected under 35 U.S.C. §103(a) as allegedly being obvious over Harding in view of Van Stevendaal in further view of U.S. Patent No. 6,529,575 to Hsieh ("Hsieh"). It is respectfully submitted that claims 1-15 are allowable over Harding in view of Van Stevendaal alone and in view of any combination of Defrise and Hsieh for at least the following reasons.

Harding shows a computed tomography apparatus that rotates an x-ray source about a circular gantry to create a circular trajectory of the x-ray source. The Office Action acknowledges that "Harding further fails to explicitly disclose rearranging the acquired CT data such that it corresponds to an acquisition where

the x-ray source is displaced along a desired source trajectory in the reconstruction volume." (See, Office Action, page 9)

While Van Stevendaal is cited in the Office Action, no part of Van Stevendaal is cited for showing that which is admitted missing from Harding.

It is respectfully submitted that the device of claim 1 is not anticipated or made obvious by the teachings of Harding in view of Van Stevendaal. For example, Harding in view of Van Stevendaal does not disclose or suggest, a device that amongst other patentable elements, comprises (illustrative emphasis added) "a processor configured to perform at least the following operation: determining a wave-vector transfer by using the at least partial spectrum; determining a reconstruction volume, wherein a dimension of the reconstruction volume is determined by the wave-vector transfer, wherein the wave-vector transfer represents curved lines in the reconstruction volume; rendering the reconstruction volume; and rearranging the acquired CT data such that it corresponds to an acquisition along a desired source trajectory in the reconstruction volume that is different than an actual source trajectory when the at least partial spectrum is acquired" as recited in claim 1, and as similarly recited in each of claims 7, 12 and 15.

While Harding does show a circular path of the x-ray source and Van Stevendaal shows an elliptical path, there simply is no suggestion to rearrange the acquired CT data such that it corresponds to a different path than the path that the CT source actually took during data acquisition.

Each of Defrise and Hsieh are introduced for allegedly showing elements of the dependent claims and as such, do nothing to cure the deficiencies in each of Harding and Van Stevendaal.

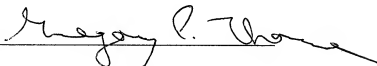
Based on the foregoing, the Applicants respectfully submit that independent claims 1, 7, 12 and 15 are patentable over Harding in view of Van Stevendaal and notice to this effect is earnestly solicited. Claims 2-6, 8-11 and 13-14 respectively depend from one of claims 1, 7 and 12 and accordingly are allowable for at least this reason as well as for the separately patentable elements contained in each of the claims. Accordingly, separate consideration of each of the dependent claims is respectfully requested.

In addition, Applicants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the

presented remarks. However, the Applicants reserve the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

Applicants have made a diligent and sincere effort to place this application in condition for immediate allowance and notice to this effect is earnestly solicited.

Respectfully submitted,

By 

Gregory L. Thorne, Reg. 39,398
Attorney for Applicant(s)
January 5, 2009

THORNE & HALAJIAN, LLP
Applied Technology Center
111 West Main Street
Bay Shore, NY 11706
Tel: (631) 665-5139
Fax: (631) 665-5101